Study Guide

Potential Kinetic Energy Energy

**“P**otential energy is energy stored within a

physical system as a result Kinetic energy is the energy possessed

the position or configuration by an object because of its motion

of the different parts of that system. All moving objects have kinetic energy.

It has the potential to be

converted into other forms of energy

, such as kinetic energy,

and to do work in the process.”

http://en.wikipedia.org/wiki/Potential\_energy

A rollercoaster is This rollercoaster has a lot of kinetic energy. not moving on top of a hill getting ready to go down.

The way we would teach it to On this one we would also use a lot of pictures.

teacher would be to use a lot

of visuals of energy waiting to

happen.

PICTURES

KINETIC ENERGY POTENTIAL

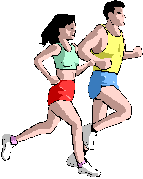
ENERGY http://sensiblesurvival.blogspot.com/2011/01/quickie-greenwood-survival-bow.html

<http://www.giantleapsot.com/toys.php?page=&search=5&perpage=200>

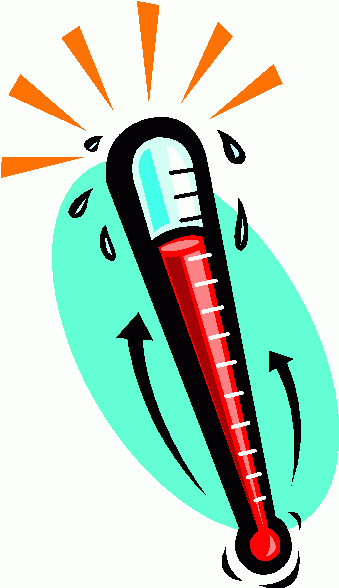
Mechanical- “ In physics, mechanical energy describes the sum of potential energy and kinetic energy present in the components of a mechanical system. Mechanical energy is the energy associated with the motion or position of an object.” <http://en.wikipedia.org/wiki/Mechanical_energy>

He pulled back the arrow and let go, this is called mechanical energy.

I would teach this with a lot of hands on things.

http://www.uwsp.edu/cnr/wcee/keep/Mod1/Rules/EnConversion.htm

Thermal- “The total potential and kinetic energy associated with the random motions of the molecules of a material. An object that feels hot has more thermal energy inside it than when the object is cool” [www.actewagl.com.au/education/glossary/default.aspx](http://www.google.com/url?q=http://www.actewagl.com.au/education/glossary/default.aspx%3Flettersearch%3Dt&sa=X&ei=7S1ZTemNLoeCtge79oyGDQ&ved=0CBYQpAMoCQ&usg=AFQjCNFzoDQ1Lhnn4lo3yzaKpKy2HFbCjQ)

Geothermal energy is an example of thermal energy. I would also teach this with hands on labs. http://ncelementaryscience.wordpress.com/2010/07/27/thermometer-quiz/

Acoustic-Sound is a travelling wave which is an oscillation of pressure transmitted through a solid, liquid, or gas, composed of frequencies within the range of hearing and of a level sufficiently strong to be heard, or the sensation stimulated in organs of hearing by such vibrations. [en.wikipedia.org/wiki/Acoustic\_energy](http://www.google.com/url?q=http://en.wikipedia.org/wiki/Acoustic_energy&sa=X&ei=2NdbTdvcLYyftwe3kOjJCw&ved=0CAQQpAMoAA&usg=AFQjCNFXy2jO-OvDDo2k73pcO8WTMV8ccg)

I would teach this with hands on labs and activities.

I got an ultra-sound at the doctor to day.

http://www.elderly.com/new\_instruments/items/PG58.htm

[en.wikipedia.org/wiki/Potential\_energy](http://www.google.com/url?q=http://en.wikipedia.org/wiki/Potential_energy&sa=X&ei=MzJVTeTuOozAtgf4roiTDQ&ved=0CA8QpAMoAQ&usg=AFQjCNENRfE8CPJAaCK5rjNGYwRUD7YHsA)